

CLAIM AMENDMENTS

IN THE CLAIMS

This listing of the claims will replace all prior versions, and listing, of claims in the application or previous response to office action:

1. (Original) An information handling system, comprising:
at least one processor;
at least one memory operably associated with the processor;
a physical layer transceiver operably associated with the memory and the processor;
a communication switch operably coupled to the physical layer transceiver via a first set of board-mounted transmission lines;
communication port operably coupled to the communication switch via a second set of transmission lines, the communication port operable to communicatively couple to an external network connection;
a port replicator connector operably coupled to the communication switch via a third set of board-mounted transmission lines, the port replicator connector operable to communicatively couple the information handling system to an external network connection via a port replicator mounted communication port; and
a plurality of inductive devices operably coupled to a plurality of transmission lines, the inductive devices selected and coupled to the transmission lines such that one or more electrical characteristics of selected transmission lines may be tuned to substantially approximate one or more electrical characteristics required by the external network.

2. (Original) The information handling system of Claim 1, further comprising positioning the inductive devices on a plurality of the transmission lines between the communication switch and the physical layer transceiver.

3. (Original) The information handling system of Claim 2, further comprising positioning the inductive devices on two pairs of transmission lines, the first pair of transmission lines for use in receiving information from the external network and the second pair of transmission lines for use in transmitting information to the external network.

4. (Original) The information handling system of Claim 2, further comprising positioning the inductive devices on four pairs of transmission lines, each of the pairs of transmission lines operable to receive information from and transmit information to the external network.

5. (Original) The information handling system of Claim 1, further comprising positioning the inductive devices on a plurality of the transmission lines between the communication switch and the communication port and on a plurality of the transmission lines between the communication switch and the port replicator connector.

6. (Original) The information handling system of Claim 1, further comprising;
a port replicator operably coupled to the port replicator connector, the port replicator including an information handling system connector, a communication port and a plurality of transmission lines operably coupling the information handling system connector to the communication port;

a plurality of inductive devices coupled to the second set of board-mounted transmission lines; and

a plurality of inductive devices coupled to the transmission lines of the port replicator.

7. (Original) The information handling system of Claim 6, further comprising the port replicator operable to receive and operate at least one add-on device.

8. (Original) The information handling system of Claim 1, further comprising the inductive devices selected and positioned such that a communication signal produced at the communication port complies with transmission line specifications as embodied in the example of IEEE 802.3ab.

9. (Original) A circuit board for use in an information handling system, comprising:

at least one Ethernet physical layer transceiver;

at least one Ethernet switch communicatively coupled to the Ethernet physical layer transceiver through a first plurality of transmission lines;

at least one Ethernet communication port communicatively coupled to the Ethernet switch through a second plurality of transmission lines;

a port replicating device connector communicatively coupled to the Ethernet switch through a third plurality of transmission lines;

a plurality of inductive devices serially coupled to a plurality of the transmission lines, the inductive devices selected and positioned such that an impedance measure from the Ethernet physical layer transceiver to an external Ethernet network connection on the circuit board substantially matches an impedance measure required by a communication protocol on the Ethernet network.

10. (Original) The circuit board of Claim 9, further comprising of the plurality of inductive devices coupled to the first plurality of transmission lines

11. (Original) The circuit board of Claim 10, further comprising an inductive device coupled to each of the first plurality of transmission lines.

12. (Original) The circuit board of Claim 9, further comprising the plurality of inductive devices operably coupled to the second and third pluralities of transmission lines

13. (Original) The circuit board of Claim 9, further comprising:
inductive devices coupled to the second plurality of transmission lines; and
the third plurality of transmission lines operable to couple to a port replicator having inductive devices coupled to corresponding transmission lines included therein.

14. (Original) The circuit board of Claim 9, further comprising the plurality of inductive devices coupled to at least two of the pluralities of transmission devices

15. (Original) The circuit board of Claim 9, further comprising:
a gigabit Ethernet switch;
an inductive device operably coupled to each of the first plurality of transmission lines; and
the inductive devices selected to substantially offset capacitive characteristics of the gigabit Ethernet switch.

16-18. (Cancelled)

19. (Original) An information handling system communication pathway, comprising:

a physical layer transceiver;

an electronic switch operably coupled to the physical layer transceiver through four pairs of transmission lines;

a communication port coupled to the electronic switch through four pairs of transmission lines;

a port replicator connection operably coupled to the electronic switch through four pairs of transmission lines;

the electronic switch operable to selectively activate communications capabilities on the communication port and the port replicator connection; and

at least one of the four pairs of transmission lines having included on each transmission line an inductive device serially coupled thereto, selection and placement of the inductive devices determined in accordance with achieving substantial impedance matching with a communication network to be connected to the information handling system.

20. (Original) The information handling system communication pathway of Claim 19, further comprising:

the inductive devices coupled between the electronic switch and the physical layer transceiver; and

the inductive devices selected and placed to substantially offset an electronic switch capacitance such that a communication signal produced on the communication pathway complies with transmission line specifications as embodied in IEEE 802.3ab.